

Environmental Community View of Environmental Regulations

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Air Emissions from Ships

Confronting the Challenges
and
Finding Solutions

Shipping Growth

■ Trends

– 1983-1998

- World seaborne trade rose 70%
- 12.6 trillion ton/miles--->21.4 trillion ton/miles
- Department of Commerce projects “doubling or tripling” of commercial vessel traffic” by 2020
- 95% of commercial goods arrive into US by ship

Shipping Emissions

■ Smog

- Currently 14% of global NOx

■ Toxics

- Currently 16% of global SOx from petroleum sources
- Very high associated levels of PM exhaust

■ Greenhouse gases (CO2)

- Currently 2% of global CO2

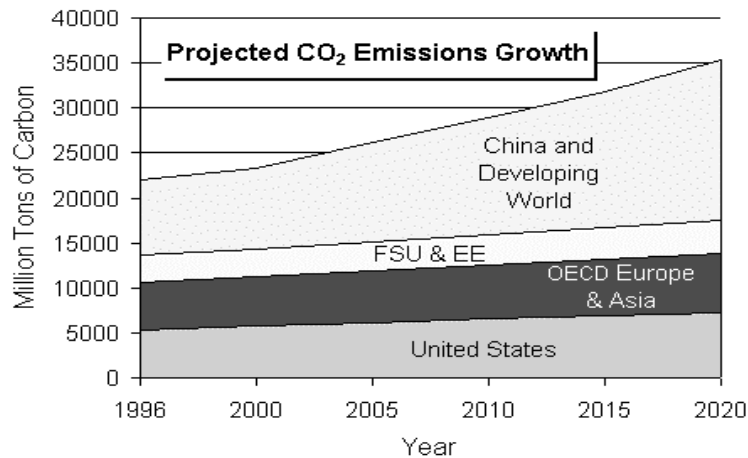
IMO Annex VI

- According to EPA, will allow US NO_x inventory from ships to grow by 6% by 2020, 13% by 2030.
- Establishes fuel sulfur caps at 4.5%, a level exceeding the highest levels found in recent studies of available residual fuels.
- Fails to set standards for PM or CO₂.

Annex VI Ratification

- Requirements:
 - 15 nations
 - 50% of world's shipping tonnage
- Currently:
 - 3 nations
 - 9% of world's shipping tonnage
- Still needed:
 - 12 nations
 - 41% of world's shipping tonnage

Global CO₂ Projections



Recommendations

- Develop Congressional support for funding of Blue Ribbon “Super Design Team” to conduct major research initiatives focused on creating significant breakthroughs in hulls, propellers and machinery.
- Coordinated approach utilizing large scale model tank testing

Bluewater Network Litigation

- Notice of Proposed Rulemaking due by April 30, 2002
- Final Rule due by January 30, 2003 (assuming Annex VI is not ratified)
- If Annex VI is ratified, EPA subject to further court challenges due to reliance upon insufficient standard and lack of enforcement mechanism as required under Clean Air Act

Foreign Vessels

- Responsible for half of US Category 3 NOx emissions (273,000 tons/yr)
- EPA refused to regulate based upon novel interpretation of the CAA term, “new engines”
 - Defined “new marine engines” to include only engines on US flag ships or “imported” for use in US flag ships
 - Defined “new marine engines” to exclude new engines on foreign ships

Legal Precedents

- Stevens v. Premier Cruises
- Cunard v. Mellon
- Benz v. Campania Naviera Hidalgo
- UN Law of the Sea
- Oil Pollution Act
- National Park Service

Legal Precedents (contin.)

- Deepwater Port Act of 1974
- Ports and Waterways Safety Act of 1972
- Canadian Air Emissions standards